

**102. Description of a New Isopod Crustacean
(Sphaeromidae) from Hokkaido.¹⁾**

By Masao IWASA.

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Tecticeps japonicus, n. sp.

Body oval in outline, 1.7 times longer than wide, widest in the fourth thoracic segment; somewhat depressed dorso-ventrally, the male being lower than the female. Surface of the body quite smooth, and colour light yellow with black markings scattered over the dorsal surface. The male is larger than the female.

Head more than twice as long as any one of the thoracic segments. Anterior margin much broader than the posterior margin, being produced in front to conceal the antennae. Posterior margin straight, neither convex as in *T. alascensis*, nor concave as in *T. convexus*. Antero-lateral margins produced outwards to form on each side an acute-angled projection, extending laterally beyond the post-lateral margins of the head; the latter are parallel-sided and meet the posterior margin at right angles. The female has a frontal margin markedly

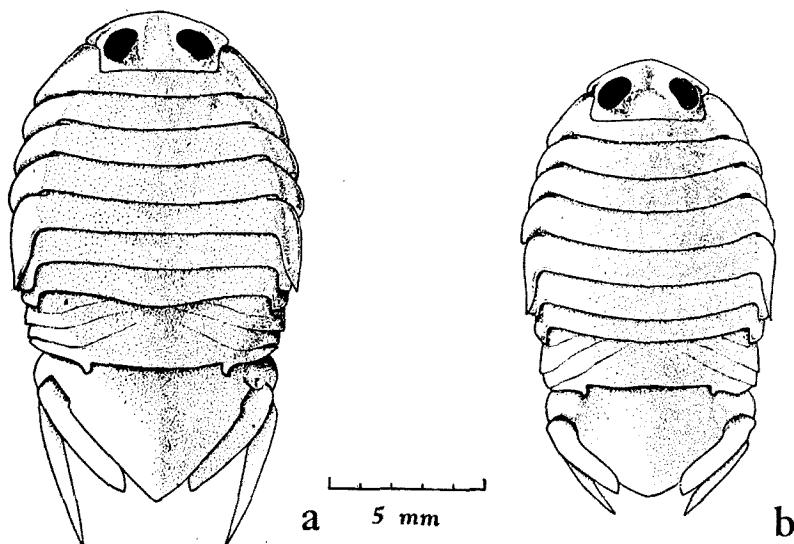


Fig. 1. *Tecticeps japonicus*, n. sp.
a, male. b, female.

1) Contribution No. 70 from the Zoological Institute, Faculty of Science, Hokkaido, Imperial University.

narrower than that of the male. Eyes bean-shaped, obliquely situated on the posterior half of the head.

The antennae lie concealed beneath the frontal margin of the head, and extend backwards under the broad epimeral plates of the thoracic segments. The first pair of antennae (Fig. 2, *a*) extend slightly beyond the posterior angle of the first thoracic segment. The flagellum has 13 articles, of which the last two are very small.

The second pair of antennae (Fig. 2, *b*) are longer than the first, reaching the middle of the fourth thoracic segment. The flagellum is 14-jointed, the last joint being very small.

The thoracic segments are subequal in length, except the first and the last, which are shorter than the others. The first segment has its antero-lateral angles produced around the posterior portion of the head, forming a broad subtriangular plate on either side of the head. The epimera of the second to the fourth segments are nearly alike, being twice as broad as long. In the fifth segment the epimera are beak-shaped, with rounded anterior and sharply pointed posterior ends two and a half times longer than their own segment. The posterior ends extend over the posterior margins of the epimera of the next segment. The epimera of the sixth and seventh segments are rectangular in shape, being a little broader than long.

The first pair of legs (Fig. 2, *i, j*) are subchelate in both sexes. The propodite is large and elliptical in outline, bearing a row of stiff bristles standing at right angles to the palm border, accompanied by another thick row of fine cilia, pointing obliquely in the opposite direction and crossing the former at acute angles. The dactylopodite is curved and ends in two sharply pointed unguis, one large and the other small; the dactylopodite of the male is somewhat longer than the palm, but in the female it is a little shorter.

The second legs of the male (Fig. 2, *k*) are subchelate like the first pair, with the propodite irregular in shape, and a convex palm provided with a rudimentary pollex. The dactylopodite is slender and curved, and is about as long as the palm. In the female the second legs (Fig. 2, *l*) are as simple as the subsequent pairs, except that the former is smaller than the latter.

The legs of the other five pairs are alike in their structure, with the posterior ones more slender; the protopodite and dactylopodite of the seventh pair are markedly longer than those of the preceding pairs.

The first segment of the abdomen has three suture lines on either side, and its posterior margin is produced into two small triangular

processes, symmetrically situated on each side of the median line, about equidistant from the line and from the lateral margins of the segment. The terminal segment is isosceles-triangular, more than two times longer

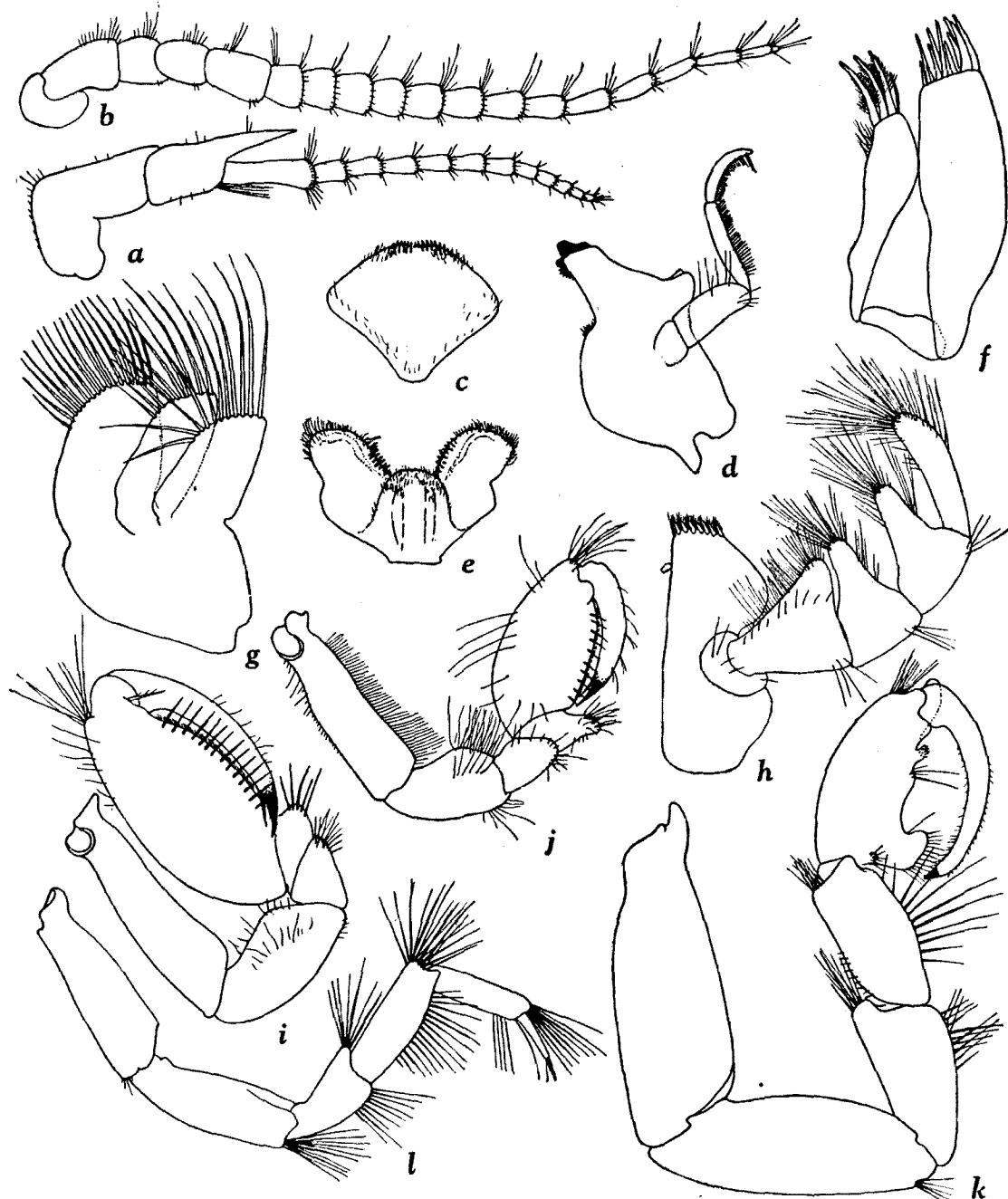


Fig. 2. *Tecticeps japonicus*, n. sp.

a, first antenna. *b*, second antenna. *c*, upper lip. *d*, mandible. *e*, lower lip. *f*, first maxilla. *g*, second maxilla. *h*, maxilliped. *i*, first leg of the male. *j*, first leg of the female. *k*, second leg of the male. *l*, second leg of the female.

than the preceding segment, and is pointed posteriorly. In the male, the lateral margins meet at the posterior end nearly at a right angle, in the female the angle is obtuse.

The uropods have two rami of unequal length. The inner branch is nearly of equal width throughout its length, being slightly curved along the outer margin of the last abdominal segment, with the end bluntly pointed. The outer branch is slender and sharply pointed, and in the male it reaches just the tip of the abdomen, while that of the female does not extend so far.

A great number of individuals were found in Akkeshi Bay, Hakkaido. They are rather common in that locality, swimming near the surface of the sea or living on the muddy or sandy bottom about ten meters below.

Remarks. The present species differs from *T. alascensis* and *T. convexus*,¹⁾ both found in the North Pacific, in having a posteriorly pointed epimera on the fifth thoracic segment, which in those species is square; in having the outer branch of the uropod longer than the inner one and extending to the tip of the abdomen in the male but not in the female, while in *T. alascensis* the outer branch in both sexes extends beyond the abdomen and in *T. convexus* both branches are subequal in length and neither extends beyond the tip of the abdomen.

1) Richardson, H.: Monograph on the Isopods of North America. Bull. U. S. Nat. Mus., No. 54 (1905).